



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,711	12/20/2000	Ben Smeets	47253-00017USPX	9096

7590 04/06/2005

Gerald T. Welch
Jenkins & Gilchrist, P.C.
3200 Fountain Place
1445 Ross Avenue
Dallas, TX 75202-2799

EXAMINER

DO, CHAT C

ART UNIT	PAPER NUMBER
----------	--------------

2193

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/742,711	Applicant(s) SMEETS, BEN	
	Examiner Chat C. Do	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/03/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-11 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 8-1 is/are rejected.
- 7) ☒ Claim(s) 4,5,7,14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment filed 01/03/2005.
2. Claims 1, 4-11, and 14-19 are pending in this application. Claims 1 and 11 are independent claims. In Amendment, claims 1 and 11 are amended; claims 2-3 and 12-13 are cancelled. This Office action is made final.

Drawings

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated as cited in the specification of present application. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without

Art Unit: 2193

underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The disclosure is objected to because of the following informalities: the applicant is respectfully requested to put appropriate the section heading as above into the specification for clarification.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Currie (U.S. 5,974,433).

Re claim 1, Currie discloses in Figure 3 an electrical device for generating multi-rate PN sequence (e.g. abstract; col. 2 lines 14-19 wherein PN sequence output as M-sequence; and output of 314 with PN code label at 315) comprising:

a sequence generation (e.g. outputs of 308 into 309) to output a plurality sequence values based of a step control signal (St) (e.g. output of 304 as the control signal to the mux);

a selection system (e.g. 309A and 309B without label) to select one of plurality of sequence values (e.g. outputs from 308) on the basis of a select value (Mt) (e.g. output of 305 as Mt), wherein the select value (Mt) provided on the basis a clock control value (e.g. 300) or signal (Ct) and a previously generated select value (e.g. 2-bit counter clk, it must store or generated based on the previous sample);

and a step control (e.g. 304) adapted provide step control signal (St) (e.g. output of 304 into 308) wherein the step control signal (St) (e.g. output of 304) is provided based on a clock control value (e.g. 300) or signal (Ct) and a previously generated selected value (e.g. 2-bit counter clk, it must store or generated based on the previous sample).

Re claim 11, it is a method claim of claim 1. Thus, claim 11 is also rejected under the same rationale as cited in the rejection claim 1.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being obvious over Currie (U.S. 5,974,433) in view of Smeets et al. ("Windmill pn-sequence generators").

Re claim 6, Currie does not disclose the sequence electrical device further comprising a windmill polynomial generator. However, Smeets et al. disclose the windmill polynomial generator (abstract lines 1-5) as a high speed sequence generator capable of producing blocks of consecutive symbols in parallel. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention is made to add a windmill generator as seen in Smeets et al.'s invention in place of sequence generator as seen in Currie's invention because it would enable to increase the output of pseudo random noise sequence (abstract line 1) by having high speed sequence generator.

Re claim 16, it is a method claim of claim 6. Thus, claim 16 is also rejected under the same rationale as cited in the rejection claim 6.

9. Claims 8-10 and 17-19 are rejected under 35 U.S.C. 103(a) as being obvious over Currie (U.S. 5,974,433) in view of Saints et al. (U.S. 6,430,170).

Re claims 8-10, Currie does not disclose sequence electrical device is used in a portable device as a mobile telephone in a stationary communication. However, Saints et al. disclose in Figure 1 sequence electrical device is used in a portable device as a mobile telephone in a stationary communication (abstract). Therefore, it would have been obvious application to a person having ordinary skill in the art at the time the invention is made to used the sequence electrical device in a portable device as a mobile telephone in a stationary communication as seen in Saints et al.'s invention into Currie's invention because it would enable to increase the security in communication by increasing randomness in sequence (col. 1 lines 40-48).

Re claim 17, it is a method claim of claim 8. Thus, claim 17 is also rejected under the same rationale as cited in the rejection claim 8.

Re claim 18, it is a method claim of claim 9. Thus, claim 18 is also rejected under the same rationale as cited in the rejection claim 9.

Re claim 19, it is a method claim of claim 10. Thus, claim 19 is also rejected under the same rationale as cited in the rejection claim 10.

Allowable Subject Matter

10. Claims 4-5, 7, and 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments filed 01/03/2005 have been fully considered but they are not persuasive.

a. The applicant argues in pages 6-7 for claims 1 and 11 that cited reference by Currie does not disclose the select value (Mt) and step control signal (St) is provided based on a clock control value or signal (Ct) and the previously generated selected value.

The examiner respectfully submits that these limitations are clearly cited in the Office action as seen above. For further clarification, the examiner interprets or cites the select value and step control signal as the output of 2-bit counter CLK 304 and 305 respectively wherein these signals are used to control the sequence generator as claimed. Clearly seen in Figure 3, the select value and step control signal are generated based on 1GHz clock signal 300 and previous generated selected value of themselves due to counters' property wherein these counter holds 2-bit or previous four samples/values.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2193

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chaki Kakali can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do
Examiner
Art Unit 2193

March 31, 2005

Kakali Chaki

**KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**